

Title (en)
Carboxylic thio-pyrrolidinyl beta-lactam compounds and production thereof.

Title (de)
Carboxyl-Thio-Pyrrolidinyl beta-Lactam-Derivate und ihre Herstellung.

Title (fr)
Dérivés de carboxyle thio-pyrrolidinyle-bêta-lactame et leur préparation.

Publication
EP 0126587 A1 19841128 (EN)

Application
EP 84303128 A 19840509

Priority

- JP 2349784 A 19840210
- JP 8144383 A 19830509
- JP 10847283 A 19830615
- JP 12748583 A 19830712
- JP 16693883 A 19830909
- JP 21285783 A 19831111

Abstract (en)
Penem compounds are of the formule: <CHEM> where R1 is H or hydroxyethyl, wherein the -OH may be protected R2 is H or a protective group, e.g. alkoxycarbonyl; R3 is H or a protective group, e.g. alkyl; X is methylene or alkyl-methylene or S; Y is amino (-NH2) which may be substituted by various groups which can form a ring. <??>Synthesis is from a B-lactam derivative wherein the 2-position has a reactive ester alcohol group or alkylsulfinyl group, reacted with a pyrrolidinyl derivative in a solvent in presence of a base. <??>The compounds are useful as antimicrobial agents.

IPC 1-7
A61K 31/40; A61K 31/43; C07D 205/08; C07D 207/16; C07D 207/24; C07D 401/12; C07D 487/04; C07D 499/00; C07F 7/18; C07F 9/65

IPC 8 full level
A61K 31/43 (2006.01); **C07D 205/08** (2006.01); **C07D 207/16** (2006.01); **C07D 207/24** (2006.01); **C07D 401/12** (2006.01); **C07D 477/20** (2006.01); **C07D 487/04** (2006.01); **C07D 499/00** (2006.01); **C07D 499/32** (2006.01); **C07D 499/88** (2006.01); **C07D 499/887** (2006.01); **C07F 7/10** (2006.01); **C07F 7/18** (2006.01); **C07F 9/6561** (2006.01)

CPC (source: EP US)
C07D 205/08 (2013.01 - EP US); **C07D 207/16** (2013.01 - EP US); **C07D 207/24** (2013.01 - EP US); **C07D 401/12** (2013.01 - EP US); **C07D 477/20** (2013.01 - EP US); **C07D 499/88** (2013.01 - EP US); **C07F 7/10** (2013.01 - EP US); **C07F 7/1804** (2013.01 - EP US); **C07F 9/65611** (2013.01 - EP US); **Y02P 20/55** (2015.11 - EP US)

Citation (search report)

- [Y] EP 0002210 A1 19790613 - MERCK & CO INC [US]
- [Y] EP 0072710 B1 19860219
- [Y] EP 0017992 A1 19801029 - MERCK & CO INC [US]
- [Y] CHEMICAL ABSTRACTS, vol. 98, no. 17, 25th April 1983, page 557, no. 143190w, Columbus, Ohio, US; & JP-A-57 176 988 (SANKYO CO., LTD.) 30-10-1982

Cited by
JP2007524670A; WO2009000210A1; US6734205B2; CN111960984A; US5527791A; EP0160391A1; US5102997A; EP0449191A1; US5438054A; US5104867A; EP2177522A4; EP0581502A1; US5242914A; EA012410B1; EP0560613A1; EP0435320A1; US5112818A; EP0182213A1; US5478820A; US5652233A; US5856321A; EP0518558A1; AP398A; US5554606A; EP0590885A1; US5310735A; US5420119A; CN101817837A; EP0581501A1; EP0551993A1; US5322952A; EP0256377A1; US4888344A; AU596857B2; FR2706460A1; IL261782B1; IL261782B2; EP0696593A3; US5519015A; CN1036713C; US4921852A; CN110062760A; EP0592167A1; US5527793A; US5444057A; US4983596A; EP0186525A1; US4740507A; AU575232B2; US6777438B2; US6946468B1; EP0442497A1; US5227376A; EP0406863A1; US5100888A; US4876365A; US4963544A; EP0238285A3; US4806637A; US5744465A; US5750735A; US5602118A; US5623081A; EP0581500A1; US5441949A; EP0562855A1; US5571805A; EP0508682A1; US5541178A; US5215983A; US6090802A; US5712267A; US5866564A; US4925838A; US4822787A; US4963543A; EP0243686A3; US5093328A; EP0882728A4; WO2009000163A1; WO2005073216A3; WO9315078A1; WO9217481A1; WO2007004028A3; WO9217479A1; EP2098525A1; WO2014104583A1; US6232338B1; US7608590B2; US7671032B2; US10172846B2; WO0144186A1; WO9114687A1; US6187804B1; US6521612B2; US7041836B2; US7342005B2; WO2007111328A1; EP2266590A2; EP2316468A1; EP2316469A1; US6541638B2; US11084833B2; WO0206222A1; WO9319070A1; WO2018071358A1; US7101897B2; US8318716B2; WO2017158616A1; US11180504B2; US8148399B2; US8153800B2; US8293895B2; US8349869B2; US8741926B2; US8754106B2; US9040562B2; US9120808B2; US9353103B2; US9623022B2; US9856265B2; EP2006290A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0126587 A1 19841128; EP 0126587 B1 19950419; AT E121402 T1 19950515; CA 1283906 C 19910507; DE 3486382 D1 19950524; DE 3486382 T2 19950817; ES 532741 A0 19851016; ES 8600305 A1 19851016; HK 183095 A 19951208; MX 9203063 A 19920701; NL 950019 I1 19951101; NL 950019 I2 19970303; US 4933333 A 19900612; US 4943569 A 19900724; US 5122604 A 19920616

DOCDB simple family (application)
EP 84303128 A 19840509; AT 84303128 T 19840509; CA 453478 A 19840503; DE 3486382 T 19840509; ES 532741 A 19840509; HK 183095 A 19951130; MX 9203063 A 19920619; NL 950019 C 19950912; US 10603587 A 19871008; US 10603687 A 19871008; US 52581790 A 19900521